



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/686,787	10/17/2003	Sergio Rossi	4235.409	7723
7590 09/16/2005				
LINIAK, BERENATO & WHITE				
Suite 240				
6550 Rock Spring Drive				
Bethesda, MD 20817				
		EXAMINER		
		NGUYEN, DONGHAI D		
		ART UNIT		
		PAPER NUMBER		
		3729		

DATE MAILED: 09/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Tate

Office Action Summary	Application No.	Applicant(s)	
	10/686,787	ROSSI, SERGIO	
	Examiner	Art Unit	
	Donghai D. Nguyen	3729	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/27/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “inserting the bars and the core inside an open-sided rotary basket ... into said bath” (claim 11, lines 5-8) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet **within the range of 50 to 150 words**. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --METHOD OF PRODUCING SUPERCONDUCTING CABLE--.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 3729

a) The claims are generally narrative and indefinite, failing to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. The following phrases and/or terms are examples: "in particular an NbTi alloy" (claim 1, lines 2-3); "possibly with the interposition of a barrier layer of noble metal or metal alloy" (claim 1, lines 4-6) and "e.g. iron" (claim 6, line 5) render the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

b) Limitations recite: "the assembly" (claim 1, line 7), "the required dimensions" (claim 2, last line), "the cold drawing steps" (claim 4, line 2) and "the same section and chemical composition" (claim 12, line 5), etc. lack proper antecedent basis.

c) Limitations recite: "bar-like" (claim 2, line 1, lines 32-33, claim 4, line 2, etc.) and "open book-fashion" (claim 2, line 10) render the claims indefinite because the claims include elements not actually disclosed (those encompassed by "bar-like" and "open book-fashion"), thereby rendering the scope of the claim(s) unascertainable

d) The scope of claims 2-12 is not clear because it's directed to a semi product and product but not the method of producing superconducting cable as disclosed in the preamble of claim 1. Further, it is unclear what exact invention applicant intends to claim i.e., method or semi product or product. Please clarify.

e) Claim 1 is being incomplete for omitting essential elements since it is not known what being referring as "exclusively cold plastic deformation".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 12 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 4,860,431 to Marancik et al or 3,686,750 to Woolcock et al.

Marancik et al disclose a method of producing superconducting cables from bars comprising a core (Nb) defined by a mono- or multifilament of superconducting material (NbTi alloy see Col. 2, lines 66-68), and by a copper sheath (Col. 3, lines 1-3), possibly with the interposition of a barrier layer of noble metal or metal alloy (Col. 3, lines 3-6), wherein said bars are assembled inside a copper shell to form an assembly, the method comprising: subjecting the assembly to a number of successive plastic deformation steps by exclusively cold plastic deformation (Col. 2, lines 41-46).

Woolcock et al disclose a method of producing superconducting cables from bars comprising a core (Nb 10 see Fig. 1) defined by a mono- or multifilament of superconducting material (NbTi alloy 12 see Col. 2, lines 32-33), and by a copper sheath (13), possibly with the interposition of a barrier layer of noble metal or metal alloy (Col. 4, lines 14-19), wherein said bars are assembled inside a copper shell to form an assembly (Fig. 1), the method comprising: subjecting the assembly to a number of successive plastic deformation (Col. 2, lines 44-48) steps by exclusively cold plastic deformation (at room temperature Col. 3, lines 47-50).

Art Unit: 3729

As applied to claim 12, Marancik et al or Woolcock et al disclose a superconducting NbTi cable produced using the method as disclosed above, the cable comprising: a relatively high critical current as claimed by Applicant (Since the cables of Marancik et al and Woolcock et al are formed by the same method as claimed by Applicant, they must have the same electrical properties of the claimed cables).

8. Regarding claims 2-11, there is no art rejections has been applied to claims 2-11, due to there are a great deal of confusion an uncertainty as to the proper interpretation of the limitations of the claims. Therefore, it would not be proper to reject such claims on the basis of prior art. See MPEP 2173.06.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art reference cited for the teaching of forming superconducting cable by cold extrusion/drawing.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (571)-272-4566. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571)-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3729

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN
September 01, 2005


MINH TRINH
PRIMARY EXAMINER